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10/657,389	09/08/2003	Hector H. Rodriguez	DP-310351	9415
22851	7590	05/03/2005	EXAMINER	
DELPHI TECHNOLOGIES, INC.			AU, SCOTT D	
M/C 480-410-202			ART UNIT	
PO BOX 5052			PAPER NUMBER	
TROY, MI 48007			2635	

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/657,389

Applicant(s)

RODRIGUEZ ET AL.

Examiner

Scott Au

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2182004.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

The application of Rodriguez et al. for a "Dual purpose vehicle key FOB for training tire pressure sensors" filed September 8, 2003 has been examined.

Claims 1-21 are pending.

### ***Drawings***

The drawings are objected to according to Figure 1 because (16) is called as a vehicle and (12) is a tire pressure sensor as described in the specification, the numbers are not matched according to the specification. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 18-20 been renumbered 18-21.

***Claim Rejections - 35 USC § 102***

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 9 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by  
Porter et al. (US# 6,745,624).

Referring to claim 9, Porter et al. disclose a tire training and vehicle command system (col. 2 lines 60-67), comprising: a key fob (14) (i.e. transmitter) transmitting vehicle control signals at least in a first mode operating the vehicle locking system and tire location codes at least in a second mode (col. 3 lines 1-22; see Figures 1-2).

Referring to claim 16, Porter et al. disclose a tire training system (i.e. see Figure 1-2), comprising: a lightweight hand held key fob housing (14) (i.e. transmitter); command input means (18A-18E) (i.e. keys input) on the housing for inputting command signals. It is inherent the processor means for receiving the command signals and determining whether the command signals from the (18A-18E) (i.e. inputting keys) are tire training command signals or vehicle control command signals, the processor means generating codes based thereon; and transmitter means connected to the processor means for transmitting the codes received from the processor means (col. 3 line 1 to col. 4 line 9; see Figure 1-2) .

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Porter et al. (US# 6,745,624) in view of Matsubara et al. (US# 6,567,012).

Referring to claim 1, Porter et al. disclose a key fob (14) (i.e. transmitter) for a vehicle (i.e. see Figure 1), comprising:  
a housing holding a processor (i.e. the processor is inherent in the fob device) and a transmitter (20) (i.e. transmitter); and plural user-manipulable keys (18A-18E) (i.e. buttons) disposed on the housing and sending signals to the processor at least when manipulated, the signals from the key (18E) (i.e. button calibrates tire sensor) representing respective tire locations when the key fob is in a first mode (col. 4 lines 9-65), the signals from at least some of the keys (18A-18D) (i.e. buttons) representing respective vehicle access commands when the key fob is in a second mode (col. 3 lines 1-9). However, Porter et al. did not explicitly disclose the keys are being dual-purpose keys.

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In the same field of endeavor of vehicle remote control device, Matsubara et al. disclose the keys are dual-purpose keys (col. 19 lines 29-63) in order to operate the devices in the vehicle.

One of ordinary skill in art understands that dual-purpose keys of Matsubara et al. is desirable in the remote device of Porter et al. because Porter et al. suggest the buttons (18A-18E) each carries different operating function of the vehicle system (col. 2 line 60 to col. 3 line 9) and Matsubara et al. suggest the number of times either the push button A or B of the transmitter 1 has been pressed, or the push buttons A and B have been pressed simultaneously for entering a function selection code may be employed in lieu of the number of times the mode setting switch 25 has been actuated to carry out a desire vehicle functions (col. 19 lines 29-65). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to include dual-purpose keys of Matsubara et al. in the vehicle system of Porter et al. with the motivation for doing so would allow the minimization of keys on the fob will provide the convenience of operating the remote device (col. 1 lines 52-60 of Matsubara et al.).

Referring to claims 2 and 3, Porter et al. in view of Matsubara et al. disclose the key fob of claim 1, Porter et al. suggest a remote car locking and tire calibration system and Matsubara et al. suggest a dual purpose keys function. Therefore, the combined of Porter et al. and Matsubara et al. suggest wherein the dual purpose keys include: a first key representing a vehicle lock command in the second mode and a first tire location in the first mode; a second key representing a vehicle unlock command in the second

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mode and second tire in the first; a third key representing a trunk unlock command in the second mode and a third tire location in the first mode; and a fourth key representing a panic command in the second mode and a fourth tire location in the first mode. The choice of which functions are assigned to the same button is based upon the designer choice.

Referring to claim 4, Porter et al. in view of Matsubara et al. disclose the key fob of claim 1, it is obvious that Matsubara et al. disclose comprising a gain amplifier connected to the transmitter, the processor causing the amplifier to establish a first power level of the transmitter in the first mode and a second power level of the transmitter in the second mode, the first power level being less than the second power level because the modes that are being actuated by more buttons (A,B,C) will consume more power (col. 26 lines 20-67).

Referring to claim 5, Porter et al. in view of Matsubara et al. disclose the key fob of claim 1, Matsubara et al. disclose wherein the processor changes at least from the second mode to the first mode when at least two keys are manipulated simultaneously (col. 19 lines 29-43).

Referring to claim 6, Porter et al. in view of Matsubara et al. disclose the key fob of claim 1, Matsubara et al. disclose wherein the processor changes at least from the first mode to the second mode when at least two keys are manipulated simultaneously (col. 19 lines 29-43).

Referring to claim 7, Porter et al. in view of Matsubara et al. disclose the key fob of claim 1, Matsubara et al. disclose wherein the processor changes at least from the first mode to the second mode after the elapse of a predetermined timeout period (col. 2 lines 1-8).

Referring to claim 8, Porter et al. in view of Matsubara et al. disclose the key fob of claim 1, Matsubara et al. disclose wherein the first mode is implicitly established by the simultaneous manipulation of two keys (col. 19 lines 29-43) .

Claims 10 -15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Porter et al. (US# 6,745,624) as applied to claim 9 above, and further in view of Matsubara et al. (US# 6,567,012).

Referring to claim 10, Porter et al. disclose the system of claim 9. However, Porter et al. did not explicitly disclose the system comprising plural dual keys on the key fob and at least one processor supported by the key fob and receiving signals from the keys.

In the same field of endeavor of vehicle remote control device, Matsubara et al. disclose the system comprising plural dual keys on the key fob and at least one processor (9) (i.e. processing circuit) supported by the key fob and receiving signals



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from the keys (col. 13 lines 22-38 and col. 19 lines 29-63; see Figures 1-2) in order to operate the devices in the vehicle.

One of ordinary skill in art understands that dual keys on the key fob and at least one processor (9) (i.e. processing circuit) supported by the key fob and receiving signals from the keys of Matsubara et al. is desirable in the remote device of Porter et al. because Porter et al. suggest the buttons (18A-18E) each carries different operating function of the vehicle system (col. 2 line 60 to col. 3 line 9) and Matsubara et al. suggest the number of times either the push button A or B of the transmitter 1 has been pressed, or the push buttons A and B have been pressed simultaneously for entering a function selection code may be employed in lieu of the number of times the mode setting switch 25 has been actuated to carry out a desire vehicle functions (col. 19 lines 29-65). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to include dual-purpose keys of Matsubara et al. in the vehicle system of Porter et al. with the motivation for doing so would allow the minimization of keys on the fob will provide the convenience of operating the remote device (col. 1 lines 52-60 of Matsubara et al.).

Referring to claims 11 and 12, Porter et al. in view of Matsubara et al. disclose the system of claim 10, claims 11 and 12 are equivalent to that of claims 2 and 3 addressed above, incorporated herein. Therefore, claims 11 and 12 are rejected for same reasons given with respected to claims 2 and 3.

Referring to claim 13, Porter et al. in view of Matsubara et al. disclose the system of claim 10, claim 13 is equivalent to that of claim 4 addressed above, incorporated herein. Therefore, claim 13 is rejected for same reasons given with respected to claim 4.

Referring to claim 14, Porter et al. in view of Matsubara et al. disclose the system of claim 10, Matsubara et al. disclose wherein the processor changes at least from one mode to the other mode when at least two keys are manipulated simultaneously (col. 19 lines 29-43).

Referring to claim 15, Porter et al. in view of Matsubara et al. disclose the system of claim 10, Matsubara et al. disclose wherein the second mode is implicitly established by the simultaneous reception of signals from two keys (col. 19 lines 29-43).

Claims 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Porter et al. (US# 6,745,624) as applied to claim 16 above, and further in view of Matsubara et al. (US# 6,567,012).

Referring to claim 17, Porter et al. disclose the system of claim 16. However, Porter et al. did not explicitly disclose wherein the command input means (i.e. see figures 1-2) include plural dual purpose keys, the processor means includes a processor, and the transmitter means includes a wireless transmitter.

In the same field of endeavor of vehicle remote control device, Matsubara et al. disclose wherein the command input means include plural dual purpose keys (A,B,C) (i.e. keys), the processor means (9) (i.e. processor) includes a processor, and it inherent the transmitter means (11) (i.e. transmission) includes a wireless transmitter. (col. 13 lines 22-38 and col. 19 lines 29-63; see Figures 1-2) in order to operate the devices in the vehicle.

One of ordinary skill in art understands that the command input means include plural dual purpose keys, the processor means includes a processor, and the transmitter means includes a wireless transmitter of Matsubara et al. is desirable in the remote device of Porter et al. because Porter et al. suggest the buttons (18A-18E) each carries different operating function of the vehicle system (col. 2 line 60 to col. 3 line 9) and Matsubara et al. suggest the number of times either the push button A or B of the transmitter 1 has been pressed, or the push buttons A and B have been pressed simultaneously for entering a function selection code may be employed in lieu of the number of times the mode setting switch 25 has been actuated to carry out a desire vehicle functions (col. 19 lines 29-65). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to include dual-purpose keys of Matsubara et al. in the vehicle system of Porter et al. with the motivation for doing so would allow the minimization of keys on the fob will provide the convenience of operating the remote device (col. 1 lines 52-60 of Matsubara et al.).

Referring to claims 18 and 19, Porter et al. in view of Matsubara et al. disclose the system of claim 17, claims 18 and 19 are equivalent to that of claims 2 and 3 addressed above, incorporated herein. Therefore, claims 18 and 19 are rejected for same reasons given with respected to claims 2 and 3.

Referring to claim 20, Porter et al. in view of Matsubara et al. disclose the system of claim 16, claim 20 is equivalent to that of claim 4 addressed above, incorporated herein. Therefore, claim 20 is rejected for same reasons given with respected to claim 4.

Referring to claim 21, Porter et al. in view of Matsubara et al. disclose the system of claim 16, claim 21 is equivalent to that of claim 14 addressed above, incorporated herein. Therefore, claim 21 is rejected for same reasons given with respected to claim 14.

### ***Claim Objections***

Claims 2-3, 11-12 and 18-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Referring to claim 2, the following is a statement of reasons for the indication of allowable subject matter: the prior art fail to suggest limitations that wherein the dual purpose keys include: a first key representing a vehicle lock command in the second mode and a first tire location in the first mode; and a second key representing a

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vehicle unlock command in the second mode and a second tire location in the first mode.

Referring to claim 11, the following is a statement of reasons for the indication of allowable subject matter: the prior art fail to suggest limitations that wherein a first key represents a vehicle lock command in the first mode and a first tire location in the second mode; and a second key represents a vehicle unlock command in the first mode and a second tire location in the second mode.

Referring to claim 18, the following is a statement of reasons for the indication of allowable subject matter: the prior art fail to suggest limitations that wherein a first key represents a vehicle lock command in a vehicle control mode and a first tire location in a tire pressure sensor training mode; and a second key represents a vehicle unlock command in the vehicle control mode and a second tire location in the tire pressure sensor training mode.

Referring to claim 19, the following is a statement of reasons for the indication of allowable subject matter: the prior art fail to suggest limitations that wherein a third key represents a trunk unlock command in the vehicle control mode and a third tire location in the tire pressure sensor training mode; and a fourth key represents a panic command in the vehicle control mode and a fourth tire location in the tire pressure sensor training mode.

**Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

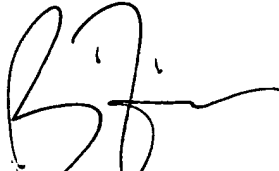
Mendez et al. (US# 5,463,374) disclose method and apparatus for tire pressure monitoring and for shared keyless entry control.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Au whose telephone number is (571) 272-3063. The examiner can normally be reached on Mon-Fri, 8:30AM – 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached at (571) 272-3068. The fax phone numbers for the organization where this application or proceeding is assigned are (703)-872-3906.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-305-3900.

Scott Au



BRIAN ZIMMERMAN  
PRIMARY EXAMINER